

## INTERNATIONAL SEARCH REPORT

10/540172  
 Rec'd PCT/PTO 17 JUN 2005  
 PCT/EP 03/12886

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B01J13/10 B01J13/14 A23L1/30 A23P1/04 A61K9/50

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01J A23L A23P A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, FSTA, BIOSIS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	RENARD D ET AL: "Biopolymeric colloidal carriers for encapsulation or controlled release applications." INTERNATIONAL JOURNAL OF PHARMACEUTICS (KIDLINGTON), vol. 242, no. 1-2, 2002, pages 163-166, XP002240500 21 August, 2002 ISSN: 0378-5173 page 165 -page 166; figure 3	1,2,9, 10,15
Y	WO 02 41711 A (UNILEVER PLC ;LEVER HINDUSTAN LTD (IN); UNILEVER NV (NL)) 30 May 2002 (2002-05-30)	1,2,4-6, 11,14,15
Y	page 10, line 15 - line 33; claims 1-10	1,2,4-6, 9-15
	---	
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

16 February 2004

Date of mailing of the international search report

02/03/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Krajewski, D

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/12886

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>OULD ELEYA M M ET AL: "The effects of pH on the rheology of beta -lactoglobulin/kappa -carrageenan mixed gels."  FOOD HYDROCOLLOIDS 14 (3) 245-251 2000  CORRESPONDENCE (REPRINT) ADDRESS, S. L. TURGEON, CENT. DE RECHERCHE EN SCI. ET TECH. DU LAIT, FAC. DES SCI. DE L'AGRIC. ET DE L'ALIMENTATION, UNIV. LAVAL, SAINTE-FOY, QUE. G1K 7P4, CANADA. TEL. +1-4,  XP002240501  paragraph '03.2!</p> <p>---</p>	1,2,4-6, 11,14,15
Y	<p>SCHMITT C ET AL: "Effect of protein aggregates on the complex coacervation between beta -lactoglobulin and acacia gum at pH 4.2."  FOOD HYDROCOLLOIDS 14 (4) 403-413 2000  LAB. DE PHYSICO-CHIMIE ET GENIE ALIMENTAIRES, INPL-ENSAIA, 2 AVE. DE LA FORET DE HAYE, BP 172, F-54505 VANDOEUVRE LES NANCY CEDEX, FRANCE. TEL. +33-3-83-59-58-61. FAX +33-3-83-59-58-04.  E-MAIL CHR,  XP002240502  paragraphs '0001!, '3.5.2!, '0004!</p> <p>---</p>	1,2,4-6, 9-15
A	<p>US 5 691 060 A (LEVY MARIE-CHRISTINE).  25 November 1997 (1997-11-25)  column 1 -column 3, line 65  examples 14-17,20  claims 1-9,11-18</p> <p>---</p>	1-18
A	<p>US 5 952 007 A (VISSER JOHANNES ET AL)  14 September 1999 (1999-09-14)  column 2, line 28 -column 4, line 47;  claims 1-7</p> <p>---</p>	1-18
A	<p>KRUIF C G DE ET AL: "Polysaccharide protein interactions."  FOOD HYDROCOLLOIDS 15 (4-6) 555-563 2001  DEBYE RES. INST., UNIV. OF UTRECHT, 3584 CH UTRECHT, NETHERLANDS. TEL. +31-318-659511. FAX +31-318-650400. E-MAIL C.G.DEKRUIF(A)CHEM.UU.NL,  XP002240503  paragraphs '3.1.2!-'3.1.4!</p> <p>---</p> <p>-/-</p>	1-18

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SYRBE A ET AL: "Polymer science concepts in dairy systems - an overview of milk protein and food hydrocolloid interaction." INTERNATIONAL DAIRY JOURNAL 8 (3) 179-193 1998 NESTLE RES. CENT., BP 44, VERS-CHEZ-LES-BLANC, CH 1000 LAUSANNE 26, SWITZERLAND, XP002240504 page 180 -page 182 page 186 -----	1-18
A	EP 0 782 883 A (JAPAN CAPSULAR PRODUCTS INC ;AJINOMOTO KK (JP)) 9 July 1997 (1997-07-09) the whole document -----	7,8,17, 18
E	EP 1 371 410 A (NIZO FOOD RES) 17 December 2003 (2003-12-17)  column 3, paragraph 13 -column 5, paragraph 26 example 2 claims 1-10 -----	1,2, 4-15,17, 18

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/12886

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0241711	A	30-05-2002	AU 1905602 A WO 0241711 A1 EP 1335652 A1 US 2003017239 A1	03-06-2002 30-05-2002 20-08-2003 23-01-2003
US 5691060	A	25-11-1997	FR 2694894 A1 CA 2142961 A1 EP 0655946 A1 WO 9404261 A1 JP 8509246 T	25-02-1994 03-03-1994 07-06-1995 03-03-1994 01-10-1996
US 5952007	A	14-09-1999	AT 180388 T AU 684738 B2 AU 5812194 A CA 2152386 A1 CN 1090474 A CZ 9501638 A3 DE 69325112 D1 DE 69325112 T2 DK 790780 T3 WO 9414334 A1 EP 0790780 A1 ES 2131671 T3 HU 72131 A2 MX 9400134 A1 PL 309632 A1 SK 82995 A3 ZA 9309417 A	15-06-1999 08-01-1998 19-07-1994 07-07-1994 10-08-1994 17-01-1996 01-07-1999 23-09-1999 15-11-1999 07-07-1994 27-08-1997 01-08-1999 28-03-1996 29-07-1994 30-10-1995 08-11-1995 15-06-1995
EP 0782883	A	09-07-1997	JP 9248137 A CN 1161790 A ,B DE 69723122 D1 EP 0782883 A2 US 2003008040 A1 US 6475542 B1	22-09-1997 15-10-1997 07-08-2003 09-07-1997 09-01-2003 05-11-2002
EP 1371410	A	17-12-2003	EP 1371410 A1 WO 03106014 A1	17-12-2003 24-12-2003